

CLAIMS

What is claimed is:

1        1. A method comprising:  
2              identifying if an event is one of a class of events to be handled in  
3        the isolated execution mode; and  
4              handling the event using the first page table map if the event is  
5        identified as one of the class of events to be handled by the isolated execution  
6        mode.

1        2. The method of claim 1 further comprising:  
2              identifying if the event is one of a class of events to be handled in  
3        the isolated execution mode; and  
4              handling the event using the first page table map if the event is  
5        identified as one of the class of events to be handled by the isolated execution  
6        mode.

1        3. The method of claim 1 wherein dynamically swapping comprises:  
2              loading a set of control registers selected based on an exception  
3        vector of the event.

1        4. The method of claim 3 wherein the set of control registers  
2        comprises:  
3              a global descriptor table register;  
4              an interrupt descriptor table register; and  
5              a page table map base address register.

1           5. The method of claim 1 wherein maintaining comprises:  
2           mirroring a page table base address register.

1           6. The method of claim 1 further comprising:  
2           defining a set of events that should be handled in isolated execution  
3 mode.

1           7. The method of claim 6 wherein the set of events to be handled in  
2 the isolated execution mode comprises:  
3           machine check events and clock events.

1           8. The method of claim 2 wherein handling comprises:  
2           determining if a current mode is the isolated execution mode;  
3           loading a set of control registers with values corresponding to the  
4 first page table map if the current mode is not the isolated execution mode and  
5 the event is one of the class; and  
6           dispatching an exception vector after the loading is complete.

1           9. An apparatus comprising:  
2           a first storage location storing control data for a first page table map;  
3           a second storage location storing control data for a second page table  
4 map; and  
5           a selection unit to select which page table map is applied responsive  
6 to receipt of an event.

1       10. The apparatus of claim 9 wherein the selection unit comprises:  
2                   a multiplexer that selects between the first and second storage  
3                   locations based on an exception vector of the event.

1       11. The apparatus of claim 9 wherein the first storage location contains  
2           a base address for the first page table map and the second storage location  
3           contains a base address for the second page table map.

1       12. A platform comprising:  
2                   a processor executing in one of normal execution mode and isolated  
3                   execution mode;  
4                   a first set of control registers to define a current memory map of the  
5                   platform; and  
6                   a mapping unit to dynamically load the first set of control registers  
7                   responsive to an event.

1       13. The platform of claim 12 wherein the mapping unit comprises:  
2                   a second set of registers having a first subset corresponding to  
3                   control register values for a normal execution mode memory map and a second  
4                   subset corresponding to control register values for an isolated execution mode  
5                   memory map; and  
6                   a selection unit to select between the first subset and the second  
7                   subset.

1       14. The platform of claim 13 wherein the selection unit comprises:  
2                   a plurality of multiplexers having selection driven by an exception  
3                   vector of an incoming event.

- 1        15. The platform of claim 12 wherein the first set of control registers  
2 comprises:  
3              a global descriptor table register;  
4              an interrupt description table register; and  
5              a page table map base address register.

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